



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,744	06/08/2001	On-Kwok Victor Li	9661-0019	5203

7590

07/01/2005

CHARLES E MILLER  
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP  
1177 AVENUE OF THE AMERICA  
4TH FLOOR  
NEW YORK, NY 10036-2714

EXAMINER

COULTER, KENNETH R

ART UNIT

PAPER NUMBER

2141

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/877,744

**Applicant(s)**

LI ET AL.

**Examiner**

Kenneth R. Coulter

**Art Unit**

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-19 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 USC 112, first paragraph. *In re Hyatt*, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983). (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.). When claims depend on a recited property, a fact situation comparable to *Hyatt* is possible, where the claim covers every conceivable structure (means) for achieving the stated property (result) while the specification discloses at most only those known to the inventor. MPEP 2164.08(a).

Claim 1 is a single means claim and is hereby rejection under 35 USC 112, first paragraph.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 – 7 and 9 – 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Law (U.S. Pat. No. 5,875,190) (Asynchronous Transfer Mode Switching System).

4.1 Regarding claim 1, Law discloses a method for providing a first address to a first node in a network having an irregular topology (col. 6, lines 29 – 34 “**arbitrary distribution network**”) such that the first address includes a description of a path to the first node, the method comprising:

establishing a mapping between plurality of output ports in the network and bits in the first address such that a packet, directed to the first address, at a second node in the network is forwarded via an output port on the second node in the network, in response to a specified bit in the first address having a specified value (Fig. 4; Abstract “The distribution network may be of a radix-r tree configuration in which multicast elements reference an extra cell header which identifies the output links of a multicast elements to which a data packet is to be transferred.”; col. 5, line 66 – col. 6, line 9; col. 8, lines 6 – 67 “The **distribution networks 131 to 13N use a self-routing addressing**

**scheme** and decentralized control.”; col. 6, line 54 – col. 7, line 5).

4.2 Per claim 2, Law teaches the method of claim 1 wherein the network is an *optical* network (col. 12, lines 15 - 28).

4.3 Regarding claim 3, Law discloses the method of claim 1 wherein at least one node in the network has more than one address (col. 8, lines 6 - 21).

4.4 Per claim 4, Law teaches the method of claim 1 wherein concurrent bits in the first address map to output ports on the second node (Fig. 4; col. 8, lines 6 - 21).

4.5 Regarding claim 5, Law discloses the method of claim 4 wherein the map is a one-to-one correspondence (Fig. 4; col. 8, lines 6 - 21).

4.6 Per claim 6, Law teaches the method of claim 4 wherein each of the output ports on the second node maps to a bit in the concurrent bits in the first address (Fig. 4; col. 8, lines 6 - 21).

4.7 Regarding claim 7, Law discloses the method of claim 1 further including associating an output port in a node to an unused bit in a sub-field corresponding to the node in an address such that in response to a new address for directing a packet to a node in the network, the packet is forwarded via the output port (Fig. 4; col. 7, lines 41 –

Art Unit: 2141

46; col. 8, lines 6 - 21).

4.8 Per claims 9 – 19, the rejection of claims 1 – 7 under 35 USC 102(b) (paragraphs 4.1 – 4.7 above) applies fully.

### ***Allowable Subject Matter***

5. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

6. Applicant's arguments filed 3/24/2005 have been fully considered but they are not persuasive.

Applicant argues that Law (U.S. Pat. No. 5,875,190) "is not directed to self-routing address assignment in a network having 'an irregular topology' as recited in the claimed invention." (Amendment on 3/24/2005 (remarks section); p. 7/7, paragraph 1, lines 2 – 3)

Examiner disagrees.

Law clearly teaches an equivalent "**arbitrary distribution network**" (col. 6, line 30).

Art Unit: 2141

Applicant teaches that the present invention is directed to “a method and system for assigning self-routing addresses to nodes in a network with **arbitrary, including irregular, topology** is provided.” (Abstract, lines 1 – 3).

Applicant's invention is directed to an arbitrary topological network.

In addition, by Applicant's definition, an arbitrary topology can encompass an irregular topology.

Also, Applicant teaches that “most practical networks exhibit irregular topologies.” (paragraph 25, line 7).

Therefore, a practical application of the Law reference would most likely exhibit “irregular topologies.”

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


Art Unit: 2141

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth R. Coulter whose telephone number is 571 272-3879. The examiner can normally be reached on 5 4 9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KENNETH R. COULTER  
PRIMARY EXAMINER  


krc